

Dear SAGES VALIDATE member, this is a brief report of the first VALIDATE workshop (23 January 2017, Aberdeen) including the discussions during the day and actions agreed:

- 1) 8 attendees from the University of Aberdeen: Luca De Siena, Danni Pearce, Ramon Pellitero, Brice Rea, Juan Alcalde, Zoë Wakeford, Simona Gabrielli, Nick Schofield.
- 2) 6 attendees from other institutions: Andrew Bell, (Edinburgh); Richard Middlemiss (Glasgow); David McFarlane and Duncan Robertson (St. Andrews); Ian Lawson (St. Andrews); Irena Connon (Dundee).
- 3) Presentations were given on lidar/radar imagery (McFarlane) and the work of the Volcanism Group in Edinburgh (Bell).
- 4) Topics highlighted (in red those who have led to an ongoing action):
 - a) Building risk maps in 4D;
 - b) Techniques that link surface and deep subsurface imaging;
 - c) Radar techniques and applicability to geographical problems;
 - d) Italian Government funding research in response to large earthquakes also for volcano monitoring;
 - e) Links between geophysical imaging and human resilience;
 - f) Geothermal energy in volcanoes – experience from Deep Drilling Project;
 - g) Involving participants with media
 - h) Volcano research facility in Russia
 - i) Focus for upcoming Global Challenges on South America
 - j) Issues with Big Data in monitoring

Actions that have followed/ were proposed:

- 1) Planning of a joint St. Andrew/Aberdeen application for SAGES PhD/ Carnegie PhD/ NERC CASE studentship for the study of volcano-glacier terrains with advanced geophysical methodologies;
- 2) Application in progress from Aberdeen/Dundee for the study of geomorphological aspects of ice-topped volcanoes and resilience of the communities living nearby, case study: Kamchatka;
- 3) Google map created with research focus areas and names of the researchers involved for future NERC GC applications at the following link:
https://drive.google.com/open?id=1MqxCEMrU2_KBV1IK9kCKcj9MghM&usp=sharing
The map can be shared if you have a google account, feel free to add your names in the descriptions/ new volcanoes. If you don't have one, send an email @ lucadesiena@abdn.ac.uk and I will add it.
- 4) Submission of a NERC Discovery proposal with PI in Aberdeen on Volcano Monitoring in Italy, involving Italian observatories;
- 5) Attendance of at least 2 members of VALIDATE and submission of at least 3 abstracts to the Building Resilience to Geohazards in the Face of Uncertainty of the Geological Society of London (<https://www.geolsoc.org.uk/buildingresilience17>);
- 6) Fieldwork and current links with Peru and Chile allow for the development of research with partner volcanological and societal institutions in the framework of volcano studies.
- 7) Submission of an application to “Increasing Resilience to Natural Hazards in Earthquake-prone & Volcanic Regions KE Fellow call” from the VALIDATE lead, supported by SAGES and Dept. of Geography, Dundee University.

The second VALIDATE workshop will be on 16 June 2017, in Edinburgh. The third is planned at the beginning of September in Dundee. Details regarding the workshops will soon follow.

Best Wishes
Luca De Siena